

**Ex. 06**

**Michael Cragg Rebuttal Opinion Summaries**



### III. Summary of Opinions

11. The Apple Experts' analyses of market definition are unreliable and fail to address, in an economically sound way, several of the Court's questions from the preliminary injunction order:<sup>3</sup>
  - a. Which platforms "are economic substitutes or are merely complementary to iOS devices;"
  - b. Does the distribution of games "constitute a separate submarket with unique characteristics that do not apply to other app developers;" and
  - c. "How *many* iOS users own multiple devices; how *many* iOS users would switch to another device in response to a price increase; and how *many* producers can afford to forego iOS customers altogether."
12. Epic alleges, among other things, that Epic Games Store and all other third-party app stores have been excluded by Apple as a competitor to its App Store and therefore have been excluded from the market for distribution of iOS apps. The starting point for the analysis should therefore be the analysis of competition for platforms that provide iOS apps. Instead, Professors Lafontaine and Hitt mistakenly focus on digital game transactions and digital game distribution because Epic is also a developer of game apps. By focusing on the wrong product and not Epic's role as a would-be direct competitor to the App Store, Professors Lafontaine and Hitt do not focus on the right market definition question.

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<sup>3</sup> Court Order Granting in Part and Denying in Part Motion for Preliminary Injunction, *Epic Games, Inc. v. Apple Inc.*, October 9, 2020 ("PI Order"), pp. 15–21. Emphasis in original.





13. Whether the focus is apps generally or game apps specifically, it is important to note at the outset that the relevant economic market is the *distribution* of those apps. That is, the relevant economic question is not whether one app is substitutable for another app (e.g., a Sudoku app and a weather app) or whether one device is substitutable for another device (e.g., an iOS device and a PlayStation). Rather, it is whether the *distribution channels* are substitutes. However, because the distribution platforms (e.g., Apple’s App Store or the Google Play Store) connect developers of apps and users of apps, assessing how developers choose to develop apps and distribute them, and how users choose to use apps, are relevant questions for the analysis of app distribution. Therefore, much of my economic analysis is about how users make use of their devices and how developers make their distribution decisions, because both perspectives are needed for understanding how a distribution platform works and whether users *and* developers can substitute from one distribution platform to another.
14. If a user will not use a second distribution channel (and thus typically a different device) sufficiently more often when there is a price change on the first distribution channel, those distribution channels are not in the same relevant antitrust market. Importantly, and as I elaborate on below, just because a user “regularly uses” one device or several devices, or whether she “has access” to one or multiple devices is insufficient for the relevant economic analysis. That is a mistake the Apple Experts make in many of their analyses; by their logic, refrigerators and TVs (let alone stereos and TVs) are in the same market because users “have access” to or “regularly use” both. The only relevant question is whether users would switch

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from using one distribution channel to another, which means from using apps (or some cohort of apps) on one device to using them on another, in response to a small but meaningful change in the price or quality of app distribution on either device (i.e., whether users would substitute from one device to another in such magnitude that such switching would act as a competitive constraint on the pricing of app distribution on the first device).

15. Rather than addressing the relevant market definition questions, or the related questions specifically identified by the Court, Apple's Experts instead focus heavily on the question of how many iOS users "use or have access to" multiple devices and whether or not those users "regularly" make use of such devices. Because some iOS users "use or have access to" and "regularly" use multiple devices on which *some* games (but by no means *all* games) are available, Apple's Experts conclude that these devices are substitutes. However, even if one were to accept that the Apple Experts' factual findings on "access" and "regular use" were correct (which I do not believe they are), the conclusion they wish to draw about there being a cross-platform game transactions market does not flow from those findings. That some iOS users "use or have access to" and "regularly" use multiple game devices is not a sufficient condition for them to be substitutes in regard to app distribution. Regular use and access to multiple devices are equally and more likely probative of those devices being *independent* of each other or being *complements*, such that there would be separate distribution markets for apps on those other devices.
16. Specifically, I conclude the following:
  - a. The Apple Experts implicitly claim (without evidence) that (1) a large number of consumers would choose to forego iOS games and (2) a large number of developers would choose to forego iOS game development in the face of an increase in the price of iOS app distribution. (This must be their claim, as it is a prerequisite to the Apple Experts' conclusions on market definition.) Their basis for these claims is evidence that

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claims to show that some consumers “have access to” or “regularly use” other devices, that some players of Fortnite play Fortnite on multiple devices, that Fortnite play on iOS devices constituted a smaller portion of overall Fortnite play after Fortnite launched on the Nintendo Switch, and that iOS game developers can develop apps for other devices. But none of this evidence suggests switching (by users or developers) in the face of an app distribution price increase, and the Apple Experts do not test whether switching would in fact occur in the face of such a price increase, let alone if it would occur to such an extent as to impose meaningful competitive constraints. When exposed to such tests, neither of these switching claims holds true.

- b. For both consumers and developers, game distribution through Windows-based PCs, game consoles like PlayStation, Xbox and Nintendo Switch (Switch), and Apple Macs, are not in the same market as game and app distribution for smartphone platforms like iOS. Games and other apps for these other platforms are not economically effective substitutes for iOS games and apps, and therefore stores for these other platforms are not substitutes for the distribution of iOS games and apps. The purchasing and usage patterns of these games and other apps show that they are more likely to be complements for iOS games and apps, or have no effect on demand for iOS games and apps at all (i.e., neither complements nor substitutes, which for purposes of market definition excludes them from the relevant market).
- c. When it comes to distribution, iOS games do not have unique characteristics that make them separable from other iOS apps. All iOS apps (including iOS games), however, do have unique characteristics that make them separable from non-iOS apps, including non-iOS games.
- d. At present, there is no cross-mobile distribution market (comprised of iOS and Android) because switching costs between these two mobile platforms are so high. If switching costs between mobile platforms were to be significantly reduced, one could imagine an all-mobile app distribution market. Such a market would be greatly facilitated by cross-platform app stores. Currently, however, switching costs are so high, cross-platform app stores are prohibited by Apple, and actual switching is thus so low, that iOS app distribution remains a market unto itself.



- e. Because each of Apple's Experts defines the wrong market, they necessarily reach unsupported conclusions on market power and effects.
- f. As noted above, the bulk of the evidence presented by the Apple Experts shows that game platforms and their related apps are *not* substitutes for iOS devices and their related apps (and in fact are complements in many instances), and thus cannot meaningfully constrain Apple's market power. The only test performed by Professor Hitt that speaks to substitution between platform usage was poorly executed, and, when corrected, shows that the Nintendo Switch is a complement to iOS (for the relatively small number of iOS users who use both)<sup>4</sup> and is certainly not a competitive alternative that curbs (or could curb) Apple's market power.
- g. The Apple Experts briefly discuss certain middleware as being a competitive threat that purportedly weakens Apple's market dominance. But they fail to note that Apple uses its market power to exclude such competitive threats from middleware; thus, while middleware has the *potential* to diminish Apple's market power, as noted by Professor Athey, it does not currently *constrain* market power.<sup>5</sup> Middleware examples that Apple excludes (and that Epic can supply) include iOS-specific app stores, cross platform game stores, cross platform game-within-game environments, and game streaming to iOS users. These middleware examples could be (but currently are not) important competitive alternatives to the Apple-controlled gateway to iOS users.

17. My report proceeds as follows: Section IV elaborates on the methodological errors in the Apple Experts' analyses, and, in particular, their focus on games. Section V presents the extensive evidence that, even accepting the Apple Experts' view that games can be separated from non-games, the distribution channels for games are platform-specific (i.e., the different distribution platforms do not constrain each others' prices) and a cross-platform games distribution market does not exist. Section VI is my analysis of Professor Hitt's market power analysis and rebuts his opinions that Apple does not have market power and has

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<sup>4</sup> 2.78 percent of Fortnite players have ever played on an iOS device and a Switch. See Table 12.

<sup>5</sup> Expert Report of Dr. Susan Athey, Ph.D., February 16, 2021 ("Expert Report of Susan Athey"), §V.H.



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lowered prices over time; corrected analyses show the opposite to be true. Section VII is my rebuttal to Professor Rubinfeld.